

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) An isolated monoclonal human antibody or antigen-binding fragment thereof that specifically binds to human T cell, immunoglobulin domain and mucin domain 1 (TIM-1), wherein said antibody or antigen-binding fragment thereof specifically binds an epitope on TIM-1 comprising the amino acid sequence PMPLPRQNHEPVAT (SEQ ID NO: 87), and wherein said antibody or antigen-binding fragment thereof comprises a heavy chain amino acid sequence comprising three complementarity determining regions (CDRs) and a light chain amino acid sequence comprising three CDRs, where the three heavy chain CDRs and the three light chain CDRS are selected from:

- (a) a heavy chain CDR1 comprising the amino acid sequence GFIFSRYGMH (SEQ ID NO: 156), a heavy chain CDR2 comprising the amino acid sequence VIWYDGSNKLYADSVKG (SEQ ID NO: 157), a heavy chain CDR3 comprising the amino acid sequence DYYDNSRHHWGFDY (SEQ ID NO: 158), a light chain CDR1 comprising the amino acid sequence RSSRSLLSDDGNTYLD (SEQ ID NO: 159), a light chain CDR2 comprising the amino acid sequence TLSYRAS (SEQ ID NO: 160), and a light chain CDR3 comprising the amino acid sequence MQRVEFPIT (SEQ ID NO: 161);
- (b) a heavy chain CDR1 comprising the amino acid sequence GFTFTNYGLH (SEQ ID NO: 138), a heavy chain CDR2 comprising the amino acid sequence VIWYDGSHKFYADSVKG (SEQ ID NO: 139), a heavy chain CDR3 comprising the amino acid sequence DLDY (SEQ ID NO: 140), a light chain CDR1 comprising the amino acid sequence RASQSVSNNYLA (SEQ ID NO: 141), a light chain CDR2 comprising the amino acid sequence GASSRAT (SEQ ID NO: 142), and a light chain CDR3 comprising the amino acid sequence QQYGSSLPLT (SEQ ID NO: 143);
- (c) a heavy chain CDR1 comprising the amino acid sequence GFTFSSYGMY (SEQ ID NO: 144), a heavy chain CDR2 comprising the amino acid sequence VIWYDGSNKYYADSVKG (SEQ ID NO: 145), a heavy chain CDR3

- comprising the amino acid sequence DFYDSSRYHYGMDV (SEQ ID NO: 146),
a light chain CDR1 comprising the amino acid sequence
RSSQSLLSDDGNTYLD (SEQ ID NO: 147), a light chain CDR2 comprising
the amino acid sequence TVSYRAS (SEQ ID NO: 148), and a light chain CDR3
comprising the amino acid sequence MQRIEFPIT (SEQ ID NO: 149);
- (d) a heavy chain CDR1 comprising the amino acid sequence GGSISSDGYYWS
(SEQ ID NO: 150), a heavy chain CDR2 comprising the amino acid sequence
VIYYSGSTFYNPSLKS (SEQ ID NO: 151), a heavy chain CDR3 comprising the
amino acid sequence ESPHSSNWYSGFDC (SEQ ID NO: 152), a light chain
CDR1 comprising the amino acid sequence RASQSIGSRLH (SEQ ID NO: 153),
a light chain CDR2 comprising the amino acid sequence YASQSFs (SEQ ID
NO: 154), and a light chain CDR3 comprising the amino acid sequence
HQSSNLPFT (SEQ ID NO: 155);
- (e) a heavy chain CDR1 comprising the amino acid sequence GFTFSRYGMH (SEQ
ID NO: 162), a heavy chain CDR2 comprising the amino acid sequence
VIWYDGSNKLYADSVKG (SEQ ID NO: 157), a heavy chain CDR3 comprising
the amino acid sequence DYYDNSRHHWGFDY (SEQ ID NO: 158), a light
chain CDR1 comprising the amino acid sequence RASQSIYSYLN (SEQ ID NO:
163), a light chain CDR2 comprising the amino acid sequence AASSLQS (SEQ
ID NO: 164), and a light chain CDR3 comprising the amino acid sequence
QQSYSTPPT (SEQ ID NO: 165);
- (f) a heavy chain CDR1 comprising the amino acid sequence GFTFRSYGMH (SEQ
ID NO: 166), a heavy chain CDR2 comprising the amino acid sequence
VIWYDGSNKYYTDSVKG (SEQ ID NO: 167), a heavy chain CDR3 comprising
the amino acid sequence DYYDNSRHHWGFDY (SEQ ID NO: 158), a light
chain CDR1 comprising the amino acid sequence RASQGIRNDLA (SEQ ID NO:
168), a light chain CDR2 comprising the amino acid sequence AASSLQS (SEQ
ID NO: 164), and a light chain CDR3 comprising the amino acid sequence
LQHNSYPSS (SEQ ID NO: 169);
- (g) a heavy chain CDR1 comprising the amino acid sequence GFTFSSYGMH (SEQ

- ID NO: 170), a heavy chain CDR2 comprising the amino acid sequence VIWYDGSHKYYADSVKG (SEQ ID NO: 171), a heavy chain CDR3 comprising the amino acid sequence DYYDTTSRHHWGFDC (SEQ ID NO: 172), a light chain CDR1 comprising the amino acid sequence RSSQSLLDSEDGNTYLD (SEQ ID NO: 173), a light chain CDR2 comprising the amino acid sequence TLSHRAS (SEQ ID NO: 174), and a light chain CDR3 comprising the amino acid sequence MQRVEFPIT (SEQ ID NO: 161);
- (h) a heavy chain CDR1 comprising the amino acid sequence GFTFSNAWMT (SEQ ID NO: 175), a heavy chain CDR2 comprising the amino acid sequence RIKRRTDGGTTDYAAPVKG (SEQ ID NO: 176), a heavy chain CDR3 comprising the amino acid sequence VDNDVDY (SEQ ID NO: 177), a light chain CDR1 comprising the amino acid sequence RSSQSLHSNGNYLD (SEQ ID NO: 178), a light chain CDR2 comprising the amino acid sequence LGSNRAS (SEQ ID NO: 179), and a light chain CDR3 comprising the amino acid sequence MQALQTPLT (SEQ ID NO: 180);
- (i) a heavy chain CDR1 comprising the amino acid sequence GGSVSSGGYYWS (SEQ ID NO: 181), a heavy chain CDR2 comprising the amino acid sequence FIYYTGSTNYNPSLKS (SEQ ID NO: 182), a heavy chain CDR3 comprising the amino acid sequence DYDWSFHFHDY (SEQ ID NO: 183), a light chain CDR1 comprising the amino acid sequence RASQGIRNDLG (SEQ ID NO: 184), a light chain CDR2 comprising the amino acid sequence AASSLQS (SEQ ID NO: 164), and a light chain CDR3 comprising the amino acid sequence LQHNSYPLT (SEQ ID NO: 185);
- (j) a heavy chain CDR1 comprising the amino acid sequence GFTFSNAWMT (SEQ ID NO: 175), a heavy chain CDR2 comprising the amino acid sequence RIKRKT DGGTTDYAAPVKG (SEQ ID NO: 186), a heavy chain CDR3 comprising the amino acid sequence VDNSGDY (SEQ ID NO: 187), a light chain CDR1 comprising the amino acid sequence RSSQSLHSNGNYLD (SEQ ID NO: 178), a light chain CDR2 comprising the amino acid sequence LGSNRAS (SEQ ID NO: 179), and a light chain CDR3 comprising the amino acid sequence

MQALQTPLT (SEQ ID NO: 180);

- (k) a heavy chain CDR1 comprising the amino acid sequence GFTFTNYWMS (SEQ ID NO: 188), a heavy chain CDR2 comprising the amino acid sequence NIQQDGSEKYYVDSVRG (SEQ ID NO: 189), a heavy chain CDR3 comprising the amino acid sequence WDY (SEQ ID NO: 190), a light chain CDR1 comprising the amino acid sequence RSSQLVHSDGNTYLN (SEQ ID NO: 191), a light chain CDR2 comprising the amino acid sequence MISNRFS (SEQ ID NO: 192), and a light chain CDR3 comprising the amino acid sequence MQATESPOT (SEQ ID NO: 193); and
- (l) a heavy chain CDR1 comprising the amino acid sequence GTFSTYSMN (SEQ ID NO: 194), a heavy chain CDR2 comprising the amino acid sequence YIRSSSTSTIYYAESLKG (SEQ ID NO: 195), a heavy chain CDR3 comprising the amino acid sequence DFDY (SEQ ID NO: 196), a light chain CDR1 comprising the amino acid sequence RSSQLVHSDGDTYLN (SEQ ID NO: 197), a light chain CDR2 comprising the amino acid sequence KISTRFS (SEQ ID NO: 198), and a light chain CDR3 comprising the amino acid sequence MQTTQIPQIT (SEQ ID NO: 199).

2. – 3. (Cancelled)

4. (Previously Presented) The antibody or antigen-binding fragment of claim 1, wherein said antigen-binding fragment comprises a Fab, Fab', F(ab')₂, or Fv fragment of said antibody.

5. (Previously Presented) The antibody or antigen-binding fragment of claim 1, wherein said antibody is a single chain antibody.

6. (Previously Presented) The antibody or antigen-binding fragment of claim 1, wherein said antibody or antigen-binding fragment is associated with a pharmaceutically acceptable carrier or diluent.

7. (Previously Presented) The antibody or antigen-binding fragment of claim 1, wherein the antibody or antigen-binding fragment is conjugated to a therapeutic agent.

8. (Previously Presented) The antibody or antigen-binding fragment of claim 7, wherein the therapeutic agent is a toxin.

9. (Previously Presented) The antibody or antigen-binding fragment of claim 7, wherein the therapeutic agent is a radioactive isotope.

10. (Previously Presented) The antibody or antigen-binding fragment of claim 7, wherein the therapeutic agent is a chemotherapeutic agent.

11. (Currently Amended) A human monoclonal antibody or antigen-binding fragment thereof that competes for binding with a human antibody that binds to human TIM-1 and comprises a heavy chain amino acid sequence and a light chain amino acid sequence selected from the group consisting of:

- (a) ~~a sequence that is at least 90% identical to~~ the variable heavy chain amino acid sequence of SEQ ID NO: 26, and ~~a sequence that is at least 90% identical to~~ the variable light chain amino acid sequence of SEQ ID NO: 28;
- (b) ~~a sequence that is at least 90% identical to~~ the variable heavy chain amino acid sequence of SEQ ID NO: 46, and ~~a sequence that is at least 90% identical to~~ the variable light chain amino acid sequence of SEQ ID NO: 48;
- (c) ~~a sequence that is at least 90% identical to~~ the variable heavy chain amino acid sequence of SEQ ID NO: 34, and ~~a sequence that is at least 90% identical to~~ the variable light chain amino acid sequence of SEQ ID NO: 36;
- (d) ~~a sequence that is at least 90% identical to~~ the variable heavy chain amino acid sequence of SEQ ID NO: 42, and ~~a sequence that is at least 90% identical to~~ the variable light chain amino acid sequence of SEQ ID NO: 44;
- (e) ~~a sequence that is at least 90% identical to~~ the variable heavy chain amino acid sequence of SEQ ID NO: 18, and ~~a sequence that is at least 90% identical to~~ the

- variable light chain amino acid sequence of SEQ ID NO: 20;
- (f) ~~a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 38, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 40;~~
- (g) ~~a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 30, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 32;~~
- (h) ~~a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 10, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 12;~~
- (i) ~~a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 2, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 4;~~
- (j) ~~a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 22, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 24;~~
- (k) ~~a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 6, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 8;~~
- (l) ~~a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 14, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 16; and~~
- (m) ~~a sequence that is at least 90% identical to the heavy chain amino acid sequence of SEQ ID NO: 50, and a sequence that is at least 90% identical to the light chain amino acid sequence of SEQ ID NO: 52.~~

12. (Previously Presented) A hybridoma cell line producing the antibody or antigen-binding fragment of claim 1.

13. – 22. (Cancelled)

23. (Previously Presented) An article of manufacture comprising a container, a composition contained therein, and a package insert or label indicating that the composition can be used to treat cancer characterized by the overexpression of TIM-1, wherein the composition comprises the antibody or antigen-binding fragment of claim 1.
24. (Original) The article of manufacture of claim 23, wherein the cancer is a lung, colon, gastric, kidney, renal, prostate or ovarian carcinoma.
25. (Previously Presented) An assay kit for the detection of TIM-1 in mammalian tissues or cells in order to screen for lung, colon, gastric, kidney, renal, prostate or ovarian carcinomas, the TIM-1 being an antigen expressed by lung, colon, gastric, kidney, renal, prostate or ovarian carcinomas, the kit comprising the anti-TIM-1 antibody or antigen-binding fragment thereof of claim 1 and means for indicating the reaction of the antibody with the antigen, if present.
26. (Cancelled)
27. (Previously Presented) The assay kit of claim 25, wherein the anti-TIM-1 antibody or antigen-binding fragment thereof is labeled.
28. (Previously Presented) The assay kit of claim 25, wherein the anti-TIM-1 antibody or antigen-binding fragment thereof is an unlabeled first antibody or antigen-binding fragment thereof and the means for indicating the reaction comprises a labeled second antibody that is anti-immunoglobulin.
29. (Previously Presented) The assay kit of claim 27, wherein the anti-TIM-1 antibody or antigen-binding fragment thereof is labeled with a marker selected from the group consisting of a fluorochrome, an enzyme, a radionuclide and a radiopaque material.
30. (Original) The assay kit of claim 28, wherein the second antibody is labeled with a

marker selected from the group consisting of a fluorochrome, an enzyme, a radionuclide and a radiopaque material.

31. - 32. (Cancelled)

33. (Currently Amended) The isolated human antibody or antigen-binding fragment of ~~claim 1~~
~~2 claim 1~~, wherein said antibody binds to human TIM-1 with a Kd between 10^{-7} and 10^{-4} M.

34. (Currently Amended) The isolated monoclonal antibody or antigen-binding fragment of
claim 1, wherein said antibody or antigen-binding fragment further comprises a heavy chain
amino acid sequence and a light chain amino acid sequence selected from the group consisting
of:

- (a) ~~a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 26, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 28;~~
- (b) ~~a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 46, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 48;~~
- (c) ~~a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 34, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 36;~~
- (d) ~~a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 42, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 44;~~
- (e) ~~a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 18, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 20;~~
- (f) ~~a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 38, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 40;~~

- (g) a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 30, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 32;
- (h) a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 10, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 12;
- (i) a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 2, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 4;
- (j) a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 22, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 24;
- (k) a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 6, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 8;
- (l) a sequence that is at least 90% identical to the variable heavy chain amino acid sequence of SEQ ID NO: 14, and a sequence that is at least 90% identical to the variable light chain amino acid sequence of SEQ ID NO: 16; and
- (m) a sequence that is at least 90% identical to the heavy chain amino acid sequence of SEQ ID NO: 50, and a sequence that is at least 90% identical to the light chain amino acid sequence of SEQ ID NO: 52.